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REMARKS

This Amendment is responsive to the Office Action dated August 9, 2004. Reconsideration is respectfully requested.

At paragraphs 1-32 of the Office Action, the Examiner rejected claims 1, 3-8, 10-12, 14-19, 21-23, 25-30, 32-34, 37-41, 44-48 and 51-54 under 35 U.S.C. 103, citing United States patent number 5,881,241 of Corbin ("Corbin"), in combination with United States patent number 5,802,054 of Bellenger ("Bellenger"). Applicants respectfully traverse this rejection.

Corbin discloses a system for registering a number of routes for which exceptional processing is desired. If a received packet matches one of the registered routes in the Corbin system, that packet is processed by the receiving system in accordance with processes or functions associated with that registered route. The system described by Corbin is intended to provide an improvement over previous systems, which passed each packet to the same set of layered processing points, regardless of the actions or routines appropriate to that specific packet or route. The Corbin system determines whether a received packet is within one of the registered routes by comparing bits in the received packet to pattern bits in a route table. As noted by the Examiner, Corbin is not concerned with changes that may occur to routes that are registered or otherwise.

Bellenger discloses a switch having nodes, each of which has a look up mode. When a frame enters the Bellenger switch, no control header fields of the frame need to be used to access the route table. The Bellenger switch may operate using CRC-like checksum derived from or read from at least portions of the frame header. Some or all of this checksum is then used as a hash code to perform an access into a route table associated with the node in the Bellenger

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switch. Bellenger also describes an alternative of using a destination address of a received frame to perform an access into the route table.

Using an entry obtained in this way from the route table, the Bellenger switch then operates to create a switch route header. This header is then attached to the received frame, and the frame is transmitted at the appropriate port, based on the route table entry. If no entry is found for the received frame in the route table, Bellenger teaches that the frame is routed to a default address, such as the address of a multiprotocol router associated with the switch. The multiprotocol router at the default address is described by Bellenger as performing management functions such as reporting status, initializing the network, broadcast functions, and managing node route tables. Bellenger further discloses that routing a received frame to a default address may alternatively involve attachment of a switch route header to the received frame to direct the frame to the default address, or forwarding the frame at a default port in the local node, such that the next node in the mesh to receive the frame also looks it up in its own route table to determine whether the frame is recognized.

Nowhere in the combination of Corbin and Bellenger, taken either independently or in combination, is there disclosed or suggested any system or method for maintaining a route table of routes between network devices in a network, including:

... a first value indicating that at least one of the routes in the given set of routes has changed, wherein each route in the set of routes includes an associated sequence number, the first value being a checksum that is a function of at least one of the sequence numbers. . .

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As in the present independent claims 1, 12, 23, 34, 41 and 48. In contrast, both Corbin and Bellenger only discuss the use of checksums generated based on header fields or the data within frames. Specifically, Corbin refers to a checksum only in the context of routing data from a producer to a consumer in the context of Fig. 3. In that section, beginning at line 13 of column 7, Corbin discusses a set of actions or functions which are called in order to perform intermediate processing of data conveyed from the producer before it is delivered to the consumer. The examples of these actions given by Corbin include validating a checksum for the data, and others. In Bellenger, the checksum is generated by a CRC-generator passed over the header of the frame, or over selected fields within the header. Neither Corbin or Bellenger include any hint or suggestion of generating a checksum of any kind based on sequence numbers associated with corresponding routes within a set of routes associated with a protocol in a routing table, as in the present independent claims 1, 12, 23, 34, 41 and 48.

For the above reasons, Applicants respectfully urge that the combination of Corbin and Bellenger fails to disclose or suggest all the features of the present independent claims 1, 12, 23, 34, 41 and 48. Accordingly, the combination of Corbin and Bellenger does not support a *prima facie* case of obviousness under 35 U.S.C. 103 with regard to independent claims 1, 12, 23, 34, 41 and 48. As to the remaining claims, they each depend from independent claims 1, 12, 23, 34, 41 and 48, and are respectfully believed to be patentable over the combination of Corbin and Bellenger for at least the same reasons. Reconsideration of all pending claims is respectfully requested.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully

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requested that the Examiner telephone the undersigned Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date


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